Revised March 7, 2003

PROJECT MANAGEMENT

PROCESS DESCRIPTION DOCUMENT

(FAA-iCMM PA 11)

FOR

VOICE SWITCHING AND RECORDING

Approved by _____ Date 3/7/03

Jim Little, Lead, AND-320
VOICE SWITCHING and RECORDING Product Team Lead

DOCUMENT CHANGE HISTORY

Version	Date	Description of Change
Original	July 2, 1999	Original
1st draft	February 19, 2003	Update to FAA-iCMM Version 2.0
	March 7, 2003	Review comments incorporated

TABLE OF CONTENTS

SECTION TITLE **PAGE**

LIST OF TABLES

LIST OF FIGURES

1. OVERVIEW

The AND-320 Project Management (PM) Process Description Document (PDD) establishes a context for project activities, supervision, and leadership. The Project Management activities and tasks include planning, managing, evaluating, taking corrective action, and communicating. Project Management activities and tasks are iterative, ongoing, and used to make informed decisions about the FAA's long-term objectives, goals, near-term activities, and institutional capabilities that are in alignment with customer needs and requirements. A fundamental goal of the Project Management process is to ensure that the project provides its customer's required/quality products and services in a cost-effective and timely manner. The Project Management process provides direction for all project efforts and forms the basis for resource allocation, capital investment, and strategic, tactical, and collaborative decision-making.

This Project Management Process Description Document outlines the activities of AND-320 Project Management and its processes using a work breakdown structure approach. Section 2 summarizes the purpose and scope of the process. Section 3 identifies the principal participants in Project Management and summarizes their responsibilities. Section 4 lists the Project Management activities along with their purpose and definition. Section 5 lists the Project Management technical activities and tasks along with their purpose and definition. Section 6 cross references each of the Project Management technical activities to the FAA-iCMM project management base practices and lists examples of documents that document implementation.

2. PURPOSE AND SCOPE

The purpose of this Process Description Document is to describe the process for Project Management activities and tasks as it applies to Voice Switching and Recording acquisitions. The Project Management process spans all five phases of the Acquisition Management System acquisition life cycle. Project Management provides a basis to manage the Voice Switching and Recording Product Team's activities effectively and efficiently. It enables the Voice Switching and Recording Product Team's lead to make critical decisions regarding implementation activities and resource allocations in a changing political and economic environment.

The Project Management process described in this document to all the Voice Switching and Recording product team's organizational elements. It is also applicable to sub-teams; for example, a logistics team or architecture team within the Voice Switching and Recording Product Team.

Because of its unique characteristics, Project Management provides overview and guidance for other management, life cycle, and support processes. These processes, in turn, provide the Voice Switching and Recording Product Team with status information, problem reports, issues/concerns, performance data, work results, and recommendations. The Project Management process directly interfaces with the following processes:

<u>Management Processes</u>

- Supplier Agreement Management – Project Management provides direction to change an existing contract via a "notice to change."

- Risk Management – Project Management provides additional risks for evaluation and mitigation.

Support Processes

- Outsourcing – Project Management provides direction to initiate outsourcing activities via a "notice to contract."
- Quality Assurance and Management – Findings identified by a Quality Assurance and Management representative is reported to the manager who decides on the needed course of action.
- Configuration Management – Managers provide copies of Project Management work products for data management control.
- Measurement and Analysis - Supports measurement and analysis of performance and process improvement goals.

3. ROLES AND RESPONSIBILITIES

The key roles and responsibilities of Project Management personnel and interfacing practitioners are described in Table 3-1:

Table 3-1.
Roles and Responsibilities for Key Project Management Personnel and Interfacing Practitioners

Role Title	Responsibilities/Value-Added	Knowledge, Skills, or Experience
ARA Director/Deputy Director	- Support the ARA Policy Statement which provides direction to Directorates on process performance and improvement through established usable, repeatable, and measurable processes - Ensure Project Management practitioners are trained - Project Management advocate	- Leadership (vision, communications) - Problem solving methods - Process improvement overview - Project Management process
Integrated Product Team Leader/Deputy Integrated Product Team Leader	Above, plus: - Ensure adequate resources for Project Management activities and tasks (includes training, quality assurance, and data management)	Above, plus: - Measurement concepts - Knowledge of product outputs/outcomes

Role Title	Responsibilities/Value-Added	Knowledge, Skills, or Experience
Voice Switching and Recording Product Team Leader/Project Lead	- Include Project Management process in Product/Functional/Project Team planning - Reinforce process performance in accordance with plans - Product/Functional/Project orientation with respect to Project Management - Ensure Process Description Documents are developed and maintained - Promote communications within product/functional/project teams - Promote communications with senior management - Project Management advocate	- Planning - Tracking - Status reporting - Measurement concepts and skills - Corrective action - In-depth knowledge of Process Improvement - Project Management process - Knowledge of product outputs/outcomes
Practitioner	- Monitor product/process compliance in accordance with Project Management process - Provide input to and/or receive output from the Project Management process - Record and report Project Management measurements and findings - Ensure product quality	- Project Management knowledge and skills - Knowledge of product outputs/outcomes - Project Management process concepts - Measurement concepts and skills
Quality Assurance and Management Practitioner	- Perform product/process assessments - Record and report findings	- Quality Assurance and Management knowledge and skills - Project Management outputs/outcomes - Project Management concepts - Measurement concepts and skills - Process and product verification and reporting methods
integrated Engineering Working Group (iEWG) Member	- Provide support to the ARA Continuous Process Improvement Goal	- Project Management expertise and knowledge

Role Title	Responsibilities/Value-Added	Knowledge, Skills, or Experience
	- Monitor process improvement activities - Focal point for process improvement	- System/software engineering expertise - Process definition experience - Organizational change experience - Technology related to planning, implementing, improving, and/or measuring quality - Process improvement champion - FAA-iCMM expert knowledge

4. MANAGEMENT ACTIVITIES

Management Activities (MAs) constitute the day-to-day Project Management process. It is the performance of these activities that institutionalizes the Project Management process within the FAA's product and services culture. First, a project needs to identify its work scope and perform the process. Second, the project needs to demonstrate its ability to "plan and track." The first eight Management Activities relate to "planning" while the last seven relate to "tracking." The Management Activities listed below are numbered to correspond with the Generic Practices (GPs) identified in the FAA-iCMM. Refer to Section 6 for additional information on the relationship to the FAA-iCMM v2.0.

MA-1, Establish Organizational Policy. Establish and maintain a Voice Switching and Recording policy for performing the management, life cycle, and support processes. The *ARA Work Process Performance and Improvement* policy statement is the overarching policy for directing the ARA organization on process performance and improvement efforts in accordance with the Acquisition Management System (AMS) policy 1.14 *Acquisition Management Process Improvement*.

MA-2, Document the Process. Establish written descriptions so that people know what to do. In addition, the process can be reviewed and improved.

MA-3, Plan the Process. **E**stablish and maintain a plan to accomplish the project objectives. Obtain buy-in from stakeholders.

MA-4, Provide Adequate Resources. Allocate and obtain adequate resources for performing the Project Management process. Resources include people, funding, tools, equipment, and facilities.

MA-5, Assign Responsibility. Assign responsibility and authority for developing the Project Management work products and providing the services of the Project Management process.

MA-6, Ensure Skill and Knowledge. Ensure that the practitioners are appropriately trained in how to perform the process. Identify training needs, or required skills in the project management plan.

MA-7, Establish Work Product Requirements. Requirements may come from the customers, policies, standards, laws, and regulations. Ensure that the services and work products generated by the team meet these requirements.

MA-8, Consistently Use and Manage the Process. Use the documented plans, standards, process, or procedures in implementing and managing the process.

MA-9, Manage Work Products. Place identified work products under appropriate levels of configuration management within the project. This step is required to ensure work product integrity throughout the life cycle.

MA-10, Objectively Assess Process Compliance. The key word is "objectively" assess compliance. Solicit people not directly responsible for managing or performing the work products to assess the adherence of the performed process to previously agreed upon requirements.

MA-11, Objectively Verify Work Products. Similar to MA-10, the emphasis is to "objectively" verify the actual products generated.

MA-12, Measure Process Performance. Measure performance against established plans. Examples would be a measurement against cost, schedule, quality, customer satisfaction, etc.

MA-13, Review Performance with Higher Management. Management review may be routine or event driven. Routine review would be scheduled reviews. Event-driven could be nonconformance report by Quality Assurance and Management and/or the lack of corrective action. Keep management and sponsor involved and informed about the process.

MA-14, Take Corrective Action. Take corrective actions when requirements are not satisfied, noncompliance is identified, and/or progress deviates significantly from the plan.

MA-15, Coordinate with Participants and Stakeholders. Coordination and communication is important to ensure mutual understanding of changes to plans, process, activities, requirements, and responsibilities.

5. TECHNICAL ACTIVITIES

The purpose of Project Management is to ensure that the project achieves its objectives by planning, scheduling, controlling, tracking, and negotiating the nature and scope of work

required and by providing visibility into status and risks. The Project Management process is ongoing for the duration of the project. The cyclical nature of Project Management Technical Activities (TAs) is shown in Figure 5-1. The paragraphs following Figure 5-1 describe the Project Management Technical Activities. Technical Activities 2, 3, and 4 are closely coupled. For small acquisitions, they may occur at virtually the same time.

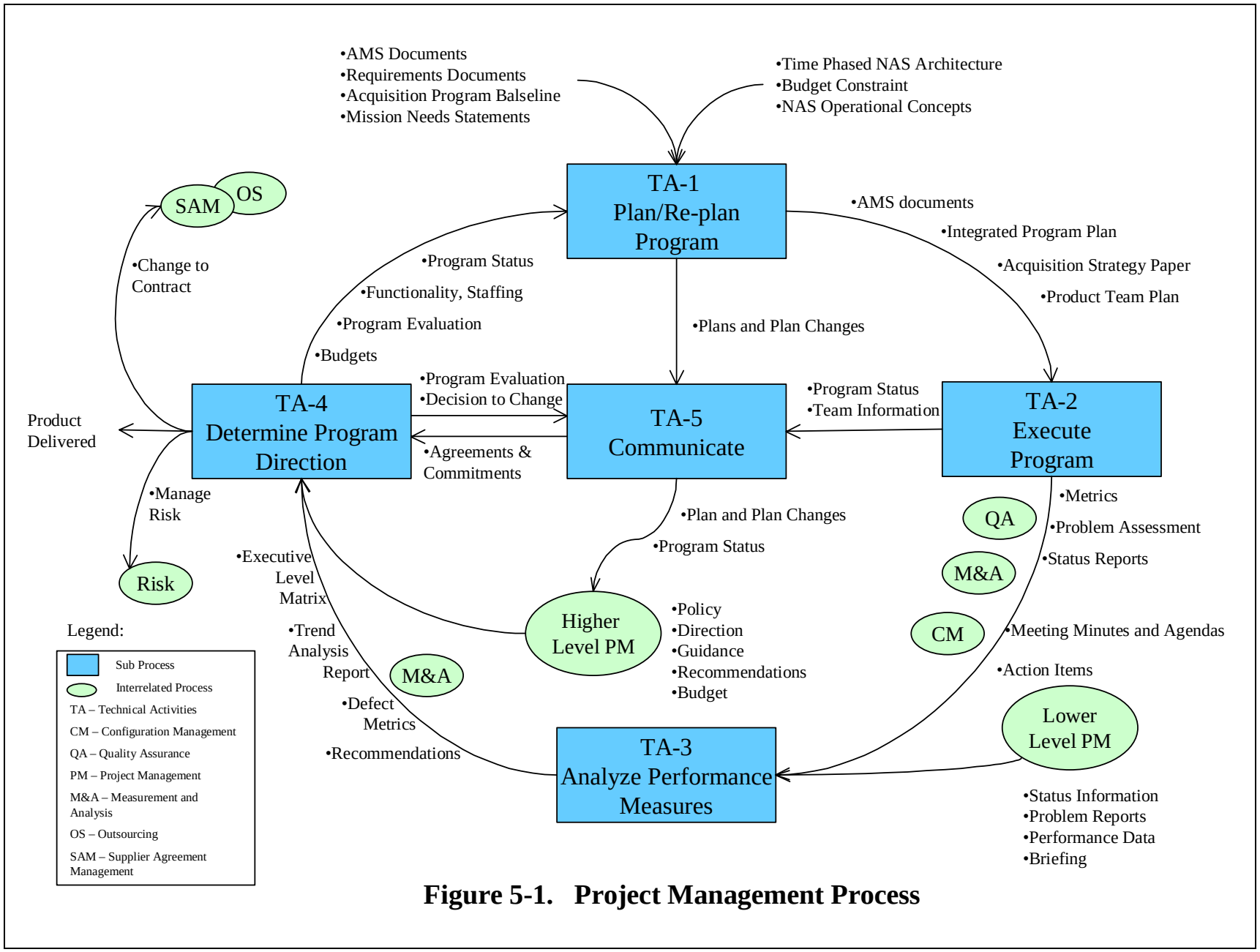

Figure 5-1. Project Management Process

TA 1 Plan/Re-Plan Project

The *plan and re-plan* process is a cyclical activity. At a minimum, a plan includes a description of work to be performed, work breakdown structure (WBS), resources required, schedules, risks, constraints, and success criteria. Lower level planning is tiered upward and provides a firm foundation for higher level planning. The plan/re-plan TAs occurs for all work performed on the project. The purpose of planning is to:

- Develop and share a clear vision for the future,
- Develop and communicate specific goals and objectives,
- Set the strategies of how to achieve performance and process goals,
- Identify the resources required and build a schedule for when it will happen, and
- Establish planned successes and how they will be measured (i.e., establish success criteria).

The plan is the document that organizes and summarizes the tasks necessary to complete the project tasks and milestones. A plan can be as simple as a documented list of tasks with anticipated completion dates. For larger projects, the tasks should be organized into a hierarchy (work breakdown structure). The complete plan ultimately will include a schedule and a list of required task resources. The plan should:

- Identify and clearly indicate the major tasks to be performed,
- Organize tasks in the most logical sequence so the tasks can be efficiently scheduled,
- Assign key team members to major tasks,
- Identify the resources necessary to complete each task so a budget can be developed,
- Develop milestones of tasks and deliverables in a logical sequence, and
- Communicate the work to be performed in an unambiguous way for team members and stakeholders to assess the program status and evaluate completion.

TA 1.1 – Identify the Activities

Identify all work required for the successful acquisition, development, deployment, and support of the system. Include both management and technical tasks. Organize tasks and sub-tasks to conform to the FAA standard work breakdown structure.

Management tasks include organizational structure, life cycle support, funding, scheduling, potential contract types and terms, end user considerations, risk management including identifying cost and schedule risks, available and projected technologies, continuous measurement and analysis, and system testing. Where different acquisition methodologies or approaches are under consideration, tradeoff analysis should be included, based on risks, needs, and resources required. When appropriate, identify and include tasks to fill gaps in policies, procedures, standards, and/or guidelines.

Technical tasks include such activities as requirement analysis, system decomposition, technical risk identification, system development and testing, and work product identification. In addition,

tasks related to facilities, support tools, integrated logistics support, and maintenance should be identified.

TA 1.2 – Identify the Life Cycle Approach

The plan should identify the life cycle approach to be used to develop and support the system, taking into consideration management issues such as the use of multiple contracts, the need for competitive efforts, build versus use of commercial off-the-shelf/non-developmental item (COTS/NDI), and the development life cycle. This life cycle approach supports the development of an acquisition strategy.

At the highest level, the technical process/development methodology should follow a life cycle model based on the characteristics of the project and the characteristics of the organization. Typical life cycle models include waterfall, evolutionary, spiral, and incremental.

TA 1.3 – Establish Planning Parameters, Resource Requirements and Schedules

Before resource requirements and schedule estimates are made, the Project Team should identify critical planning parameters, which typically include project size, scope and complexity. Whenever possible use historical data to facilitate the identification of planning parameters. Specifically, checklists, historical data, and lessons-learned documents can be used to identify cost items that may otherwise be overlooked. Document the basis and rationale for planning parameters.

The Project Management plan should include the project's life cycle estimates for cost, schedule, size of work products, effort, and critical technical parameters, and management and technical schedules.

A detailed estimate of project costs, including life cycle support costs is essential for Project Management. Estimates of project costs are determined by the labor costs, material costs, and contractor costs expected for the project's planned activities and the identified scope of the system to be built. Include both direct costs and indirect costs (such as the cost of tools, training, special test, and support items). Investment Analysis documents serves as input and are used in the estimation process. Estimates are independently reviewed.

Base project schedules on verifiable effort models or data for identified tasks. They allow for task interdependencies and the availability of procured items. Whenever appropriate, include slack time in schedules for identified risks.

A project network diagram, if properly sequenced, would identify work dependencies as critical and would accomplish the following:

- Show the sequences and relationships among tasks necessary to complete a project,
- Identify relationships of milestones in the project that can be used for monitoring progress and completion,

- Show the interrelationships of tasks in different parts of the task list and work breakdown structure,
- Establish a basis for scheduling and re-scheduling tasks,
- Help reduce uncertainty in the project by breaking it into small phases that have been analyzed and sequenced prior to start of work, and
- Help substantiate schedule and budget estimates.

All affected parties must review and commit to the project estimates and schedules.

TA 1.4 – Establish and Maintain Plans

This Project Management Plan, and its associated sub-plans, if any, should be maintained for the duration of the project's life cycle. This Plan should include:

- Description of work to be performed,
- Resources required,
- Roles and responsibilities assigned,
- Schedule,
- Risks,
- Constraints,
- Commitments,
- Stakeholders involvement and
- Success criteria.

If COTS/NDI is going to be used on the project, develop a strategy and/or plan outlining how the COTS/NDI will be selected, procured, integrated, tested, and maintained.

The plan should also identify the groups internal and external to the project's organization that the project needs to interact with to be successful. It should delineate a process for negotiation with these groups. Commitments made with each of these groups should be documented in the plan or its revision. External organizations may include unions, airlines, RTCA, National Weather Services, and Department of Defense, as appropriate.

This plan should be maintained and modified, as appropriate, for the duration of the project to reflect current scope, approach, schedule, and responsibilities.

TA 2 – Execute Project

This Technical Activity adds lower level detail to the plan, and then executes the detailed plan. The daily/weekly detail that is required to complete the tasks and milestones identified in the plan is added.

One of the principle outputs of this Technical Activity is the program data (i.e., status, quality, performance, cost, and variances) that will be analyzed in Technical Activity 3, and evaluated Technical Activity 4 for problems and appropriate corrective actions.

TA 2.1 – Manage the Project According to Established Plans

Project plan elements are decomposed into lower levels of details, adding sufficient information to ensure program tasks are executed and milestones are successfully met. Examples of other activities include: 1) identify and track constraints and dependencies, 2) assign work to individuals or small work teams, and 3) negotiate detailed internal commitments. External and internal commitments are tracked to closure.

Direct and track project efforts and activities based on these lower levels of details including technical and programmatic parameters. The timely tracking of actual progress against planned progress can be used to compare to the established thresholds so that potential problems can be detected early and corrective actions taken.

TA 2.2 – Manage Resources

Resources, which include personnel, facilities, equipment, tools, materials, supplies, and information resources of the project should be managed according to the project plan. Build and maintain the team by determining the required skills and experience, matching skills to tasks, acquiring personnel, and the encouraging cohesiveness and cooperation of the team. Promote effective team communication, help the team deal with change, and resolve conflicts.

TA 2.3 – Review Performance Against Established Plans

Project performance should be reviewed against the established plan. This includes conducting periodic, formal and informal reviews of all internal project activities, and contractor activities.

Status data is the principal type of information gathered at reviews. This includes status of work performed versus work scheduled, volume and quality of work being performed, and expenditure of resources.

Project management and/or Quality Assurance and Management should schedule and conduct reviews in accordance with approved agendas. Meeting minutes should be recorded and action items should be recorded and tracked to closure. Reviews include all affected groups and individuals which potentially includes senior management, project management, systems engineers, test, maintenance, operations, quality assurance, human factors, safety, security, controllers, maintainers, end- users, contractors, external/interfacing system representatives, and business office personnel.

TA 3 – Analyze Performance Measures

Project Management should review and analyze project performance data to identify risk or variance so as to determine whether corrective action is needed, and whether measurement frequency and variance reporting thresholds need to be revised. In addition, project performance is reviewed with stakeholders to assure agreements are being honored and satisfied.

TA 3.1 – Analyze Programmatic Measures

Analyze programmatic measures for both the government and contractor, providing a comprehensive picture of the project's programmatic status. Earned Value Management (EVM) is an example of this TA. Compare programmatic data such as work performed and cost of work performed against plans and schedules. Compare spending against plans.

TA 3.2 – Analyze Product Measures

Analyze product measures to provide a comprehensive picture of the product's status. Select product measures to reflect key performance requirements. Product measures frequently include size, weight, response time, memory utilization, functional capabilities, and computer human interface requirements. Tests, models, and/or simulations frequently provide this type of product data.

The technical development plan may include improvements in response times as the product development continues. Scheduled tests that measure response times would provide input to this technical activity.

TA 3.3 – Analyze Process Measures

Analyze process measures to provide a comprehensive picture of the government and contractor process's status. Process measures can include closure rates for problem reports, error sources, and/or process compliance.

TA 3.4 – Conduct Trend Analysis

Appropriate integration of the programmatic, product, and process measures would result in an integrated view of the project status. Generate program reports and metrics based on program requirements (e.g., Executive Level Metrics (ELM) and Congressional Reports). Identify potential problem areas and conduct trend analyses.

TA 3.5 – Analyse Requirement Solution Alternatives

Revisit the requirements that have been provided by either internal FAA organizations or outside organizations. The Requirements (PA02) practitioners provide initial "make/buy" recommendations based on knowledge of potential requirement solutions. The Design (PA03) practitioners provide initial "make/buy" recommendations based on knowledge of potential system component solutions. Practitioners of other Process Areas also contribute "make/buy" recommendations.

Combine the various recommendations, add a broader system perspective and provide alternative allocations. For example, the requirement to test a system may be allocated to ACT, while the requirement to coordinate external user concept of operations may be allocated to RTCA Inc.,

and the requirement to provide a digital voice-switching box may be allocated to a commercial organization.

TA 4 – Determine Project Direction

This Technical Activity adds expert judgment and knowledge of external influences to the information provided by Technical Activity 3 and determines any corrective actions required. If this Technical Activity results in a decision to contract for a commercial solution, either the support process Outsourcing or the management process Supplier Agreement Management is activated.

TA 4.1 – Evaluate Project

Combine the project information from Technical Activity 3 and incorporate project management expert judgment and changing external constraints and conditions. External constraints and conditions include changing budgets, organizational priorities, policies, standards, requirements interface dependencies, and/or guidance. This Technical Activity is focused on determining product acceptability. Changes or potential changes to agreements and/or commitments by stakeholders are key external conditions that must be addressed.

If the evaluation determines that a project is progressing as planned, no action further may be necessary. Project management can bypass the "re-plan" stage and go to Technical Activity 2. If the evaluation identifies issues, corrective actions would be required.

TA 4.2 – Analyze Decision

Prior to making corrective action, project management need to determine the best course of action for the issues identified. These actions may include:

- Determining the underlying cause of problem,
- Determining if project goals and priorities are still appropriate,
- Coordinate with PA-02 Requirements to assure project requirements are properly managed and changes documented
- Examine a full range of potential solutions ,
- Analyzing the options, including cost, schedule, risk areas and operational impacts,
- Understanding the impacts to the team as you consider trade-off options, and
- Determining course of action.

TA 4.3 – Take Corrective Action

Take corrective action to eliminate the causes of an existing nonconformance, defect, or otherwise undesirable situation. Corrective action may also be taken to prevent reoccurrence of an undesirable outcome. Examples of corrective actions could include:

- Reallocate resources

- Modify existing methods and procedures
- Request to Supplier Agreement Management (PA12) to implement contract change or modification,
- Request to Outsourcing (PA05) to initiate outsourcing activities,
- Request to Risk Management (PA13) to address newly identified risk area, and/or
- Request to technical activity Technical Activity -1 to complete replanning based on new or changed direction including documenting change and rational.

The corrective action implemented may warrant a "re-plan" process taking the planning cycle back to Technical Activity -1.

TA 5 – Communicate[1]

The purpose of this technical activity is to maintain the commitment of all affected groups and individuals on the project, through effective communication. Establishing a plan, including schedule and resources for recurring communication is important.

TA 5.1 – Determine Purpose of Communication

Determine the specific purpose, goals, and/or needs of the communication. The purpose may be to share information, educate, coordinate, elicit a decision, establish/maintain commitment, gather information, address issues and/or concerns.

TA 5.2 – Determine Audience and Mechanism

Determine the best mode of communications based on the targeted audience. Communication mechanisms include formal presentation (Acquisition Reviews (ARs), JRCs, ATCA panels), status reports, alert bulletins, newsletters, phone calls, e-mails. Use more than one means: text, photographs, diagrams, prototypes, display samples, movies, and verbal.

TA 5.3 – Gather and Prepare Information

Preparation for communication include gathering information, preparing briefing packages, getting sufficient copies, setting up meeting space, identifying questions that might be asked, and building displays and mock-ups. If necessary, it may include running additional studies, building prototypes, or running simulations.

TA 5.4 – Execute Communication

Communication is a two-way street. It is important to obtain feedbacks from the audience. Good listening skill is essential. Once project management gets a response from the

[1] Project Management is encouraged to contact the "Communications Working Group" established by iPG. This working group may be a valuable resource on effective communications at managerial and stakeholders levels.

stakeholders, it is important that actions are taken to address such response. Equally important, PM's action should be communicated back to the stakeholders.

TA 5.5 – Share Information

Document the information gathered and the commitments established/maintained. Sharing the results with the team is part of the continuous communications that is required for successful Project Management. The use of a web site is an effective means of sharing information.

6. RELATIONSHIP TO THE FAA-iCMM v2.0

This Project Management Process Description Document was updated to reflect the new requirements of the Process Improvement model. Table 6-1 provides cross-references of the major elements of this document to the Process Areas described in FAA-iCMM v1.0 and v2.0. Table 6-2 is a sample list of documents that support the Project Management Base Practice. This list is organized according to its appropriateness to the FAA-iCMM Process Areas. Many of these documents are work products of the sub-processes in this Project Management Process Description.

Table 6-1. Mapping of the Technical Activities to the FAA-iCMM Base Practices

	Documents	FAA-iCMM v2.0 Base Practices											
		BP 11.01 Define Project Objectives, Scope, and Outputs	BP 11.02 Define the Activities and Life Cycle Approach	BP 11.03 Estimate Planning Parameters	BP 11.04 Estimate Project Resource Requirements	BP 11.05 Establish Schedules	BP 11.06 Establish and Maintain Plans	BP 11.07 Establish Commitment	BP 11.08 Organize to meet Project Objectives	BP 11.09 Direct the Project	BP 11.10 Monitor Project Performance	BP 11.11 Review and Analyze Project Performance	BP 11.12 Take Corrective Action
Plan/Re-plan Project	1.1 - Identify the Activities	X	X						X				
	1.2 - Identify the Life Cycle Approach		X										
	1.3 - Establish Planning Parameters, Resource Requirements and Schedules			X				X					
	1.4 - Establish and Maintain Plans					X	X	X					
Execute Project	2.1 - Manage the Project According to Established Plans									X	X		
	2.2 - Manage Resources										X		
	2.3 - Review Performance Against Established Plans										X	X	
Analyze Performance Measure	3.1 - Analyze Project Measures										X		
	3.2 - Analyze Product Measures										X		
	3.3 - Analyze Process Measures										X		
	3.4 - Conduct Trend Analysis											X	
	3.5 - Analyze Requirement Solution Alternatives											X	
Evaluate Project	4.1 - Evaluate Project												
	4.2 - Analyze Decision										X	X	
	4.3 - Take Corrective Action												X
Communicate	5.1 - Determine Purpose of Communication									X			
	5.2 - Determine Audience and Mechanism									X			
	5.3 - Gather and Prepare Information									X			
	5.4 - Execute Communication									X			
	5.5 - Share Information									X			

Table 6-2. List of Documents that Support the Project Management Base Practices.

Documents	Base Practices in Project Management												
	BP 11.01 Define project objectives, scope and outputs	BP 11.02 Define the activates and life-cycle approach	BP 11.03 Establish planning parameters	BP 11.04 Establish Project resource requirements	BP 11.05 Establish schedules	BP 11.06 Establish and maintain plans	BP 11.07 Establish commitments	BP 11.08 Organize to meet project objective	BP 11.09 Direct the project	BP 11.10 Monitor Project performance	BP 11.11 Review and analyze performance	BP 11.12 Take corrective action	Total
Acquisition Project Baseline (APB)	X	X			X								3
Acquisition Strategy Paper (ASP)	X	X			X								3
Action Items								X	X	X	X	X	5
Activity Charts					X				X	X	X		4
Alerts, Baseline Breaches, etc.							X		X	X			3
Communications Mechanism						X							1
Configuration Management						X							1
Contract Modifications									X				1
Cost of Acquisition	X		X	X									3
Cost of Labor	X		X	X									3
Cost of Materials			X	X									2
Cost of Subcontracts			X	X									2
Cost of Tools and Training				X									1
Critical Path					X					X	X		3
Decision to Change Notices									X			X	2
Deployment Plan					X								1
Earned Value Management										X	X		2
Estimates of the Scope of the System			X	X	X				X				4
Executive Level Matrix										X	X		2
Feasibility Cost Analysis			X								X		2
Integrated Project Plan (IPP)	X		X		X								3
Life Cycle Support Concept		X											1
Life Cycle Support Costs			X	X									2
List of Customers	X		X				X						3
List of Risks			X								X		2
Lists of Identified Technical Activities	X	X											2
Meeting Minutes and Agendas	X							X	X	X	X	X	6
Metrics							X	X		X			3
Milestone Charts					X		X	X			X		4
Performance Measures	X						X	X		X	X		5
PERT Diagrams					X						X		2
Plan Changes						X			X			X	3
Policy Gaps	X										X		2
Product Team Plan	X	X			X								3

Documents	Base Practices in Project Management												
	BP 11.01 Define project objectives, scope and outputs	BP 11.02 Define the activates and life-cycle approach	BP 11.03 Establish planning parameters	BP 11.04 Establish Project resource requirements	BP 11.05 Establish schedules	BP 11.06 Establish and maintain plans	BP 11.07 Establish commitments	BP 11.08 Organize to meet project objective	BP 11.09 Direct the project	BP 11.10 Monitor Project performance	BP 11.11 Review and analyze performance	BP 11.12 Take corrective action	Total
Project Evaluations									X	X	X		3
Project Schedules					X	X			X		X		4
Quality Assurance and Measurement Review and Audit						X				X		X	3
Re-use Plan					X	X			X				3
Risk Management Plan					X	X							2
Schedule Changes						X			X			X	3
Statement of Work (SOW)	X								X		X		3
Status Reports									X		X		2
System Test Concept									X		X	X	3
Technical Schedules					X				X				2
Test Plan					X				X	X			3
Work Breakdown Structure (WBS)	X	X											2
Total	13	6	10	7	15	8	5	5	17	12	17	7	122